

**5.1 Writing Linear Equations in Slope-Intercept Form (2 pts. Each)**

Write the equation of the line given the slope and the y-intercept.

1. slope =  $-7$   
y-intercept =  $5$

2. slope =  $\frac{2}{3}$   
y-intercept =  $-7$

**5.1 Writing Linear Equation in Slope-Intercept Form (2 pts. Each)**

Write the following equation in slope-intercept form.

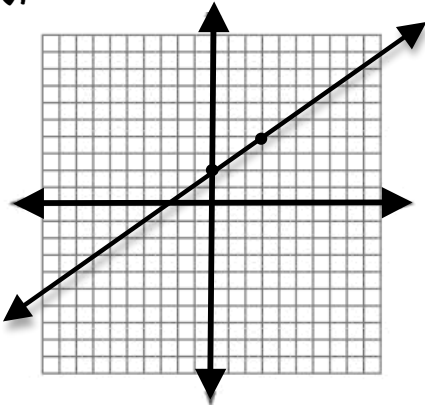
3.  $3x - 6y = 9$

4.  $2y - 14x - 8 = 0$

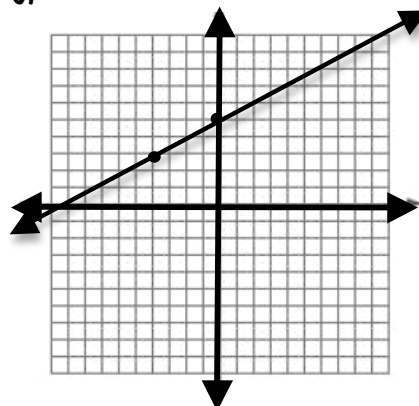
**5.3 Writing Linear Equations Given Two Points. (3 pts. Each)**

Write the equation of the line shown in slope-intercept form.

5.



6.



**5.2 Writing Linear Equations Given the Slope and a Point. (3 pts. Each)**

Write an equation of the line in slope-intercept form that passes through the point and has the given slope.

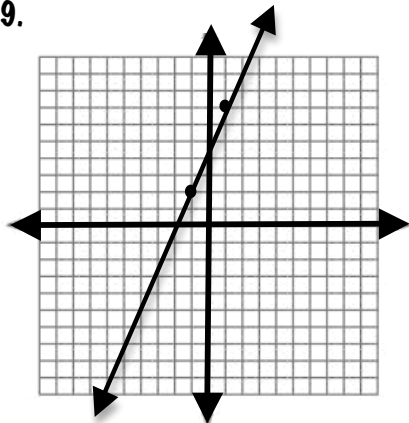
7.  $(6, -5)$  &  $m = -4$

8.  $(0, -3)$  &  $m = \frac{2}{3}$

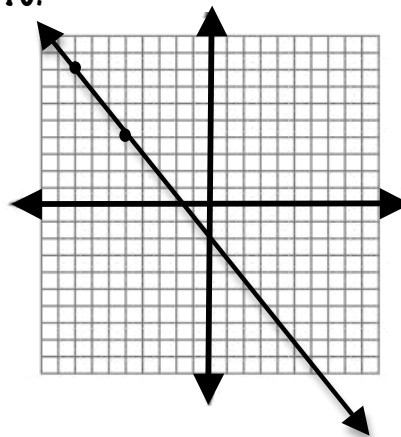
**5.3 Writing Linear Equations Given Two Points (3 pts. Each)**

Write the equation of the line in slope-intercept form shown in the graph.

9.



10.



**5.2 Writing Linear Equations Given the Slope and a Point (4 pts. Each)**

Write the equation of the line in slope-intercept form that is parallel to the given line and passes through the given point.

11.  $y = -4x - 7$  &  $(5, -3)$

12.  $y = -\frac{2}{3}x + 4$  &  $(-5, 5)$

**5.3 Writing Linear Equations Given Two Points (4 pts. Each)**

Write an equation in slope-intercept form of the line that passes through the points.

13.  $(-4, 2)$  &  $(1, -1)$

14.  $(-2, -1)$  &  $(3, 5)$

15.  $(-5, 3)$  &  $(4, -5)$

16.  $(-1/2, -1)$  &  $(3, 5/2)$

**5.2 Writing Linear Equations Given the Slope and a Point (4 pts. Each)**

Write the equation of the line in slope-intercept form that is perpendicular to the given line and passes through the given point.

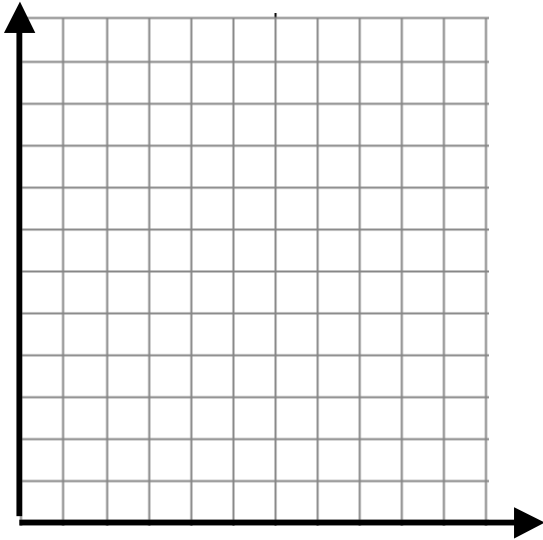
17.  $y = -2x + 8$  &  $(-4, -8)$

18.  $y = 3/2x + 3$  &  $(6, 4)$

**5.7 Predicting with Linear Models (7 pts. Each)**

Draw a scatter plot of the data. Draw a best fitting line and write an equation of the line in slope-intercept form.

19.



X	Y
2.2	6.2
2.5	6.5
2.8	6.9
3.2	7.3
3.6	7.6
4.0	7.9
4.5	8.3
4.9	8.7

**5.6 Writing an Equation in Standard Form (2 pts. Each)**

Write the equation in standard form.

20.  $-3x + y + 9 = 0$

21.  $\frac{2}{3}x + \frac{3}{5}y = \frac{2}{3}$

**5.6 Writing an Equation in Standard Form Given a Point and Slope (5 pts. Each)**

Write the standard form of an equation of the line that passes through the given point and has the given slope.

22.  $(6, 4)$  &  $m = 5$

23.  $(-3, -8)$  &  $m = \frac{1}{3}$

**5.6 Writing an Equation in Standard Form Given Two Points. (5 pts. Each)**

**Write the equation in standard form of the line that passes through the two points.**

**24.  $(3, -7)$  &  $(-3, -11)$**

**25.  $(2, -3)$  &  $(-6, 2)$**